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TEST REPORT

GRADATION TEST ON COARSE AGGREGATES 40mm ↓ Graded

Name & Address of the Customer	AEE,Yalahanka Division BBMP. Banglore
Name of Work	**"Improvements to roads and drains balance main and cross roads of B Section in wars no -04"**
Name of the Agency	Sri. Venkatesh. V
Date of Testing	03/03/2021
Specific Gravity	**2.62**
Water Absorption	**0.30%**
Technical Reference	IS : 2386(Part I)-1963 (Reaffirmed 2016), IS : 2386 (Part III)-1963 (Reaffirmed 2016)

IS Sieve Designation (mm)	Sieve Analysis (% Passing IS Sieve)	Grading Requirement as per IS 383 : 2016	Remarks
80	**100**	100	**Satisfies the requirement**
40	**98.6**	90-100	
20	**68.2**	30-70	
10	**28.1**	10-35	
4.75	**4.1**	0-5	

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TEST REPORT

DETERMINATION OF BINDER CONTENT FROM BITUMINOUS PAVING MIXTURE FOR QUALITY CONTROL - BITUMINOUS MACADAM MIX-GRADE 2

Name & Address of the Customer	AEE,Yalahanka Division BBMP. Banglore.
Name of Work	**"Improvements to roads and drains balance main and cross roads of B Section in wars no -04"**
Name of the Agency	Sri. Venkatesh. V
Date of Testing	10/03/2021
Technical Reference	ASTM: D2172/D2172M-17 - Test Method A - Centrifuge Extraction

Specification: As Per MORTH (4th Revision) Table 500-4 BM-Grade -2, Bitumen Content for BM Grade-2 is 3.3 % TO 3.5 %

Sl. No.	Description	Values
1	Weight of bituminous mixture before extraction test, W_1 g	2000.0
2	Total Weight of mineral aggregate obtained from centrifuge extractor, W_2 g	1932.0
3	Total weight of Bitumen extracted from the mixture, W_3 g = (W_1-W_2) g	68.0
4	Bitumen content in %, (W_3/W_1) %	3.4

Remarks	Satisfies the requirement

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TEST REPORT

GRADATION TEST ON BITUMINOUS MACADAM MIX GRADE - 2

Name & Address of the Customer	AEE,Yalahanka Division BBMP. Banglore.
Name of Work	**"Improvements to roads and drains balance main and cross roads of B Section in wars no -04"**
Name of the Agency	Sri. Venkatesh. V
Date of Testing	10/03/2021
Technical Reference	IS : 2386(Part I)-1963 (Reaffirmed 2016)

	Sample-		
IS Sieve Designation (mm)	**% By Weight Passing IS Sieve as per MORTH (4th Revision) Table 500-4 for BM Grade-2**	**Actual % By Weight Passing IS Sieve**	**Remarks**
26.5	100	**100**	**Satisfies the requirement**
19	90-100	**98.7**	
13.2	56-88	**86.4**	
4.75	16-36	**32.6**	
2.36	4-19	**15.9**	
0.3	2-10	**8.9**	
0.075	0-8	**6.1**	

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TEST REPORT

DETERMINATION OF BINDER CONTENT FROM BITUMINOUS PAVING MIXTURE FOR QUALITY CONTROL - BITUMINOUS CONCRETE MIX-GRADE 2

Name & Address of the Customer	AEE,Yalahanka Division BBMP. Banglore.
Name of Work	**"Improvements to roads and drains balance main and cross roads of B Section in wars no -04"**
Name of the Agency	Sri. Venkatesh. V
Date of Testing	10/03/2021
Technical Reference	ASTM: D2172/D2172M-17 - Test Method A - Centrifuge Extraction

Specification: As Per MORTH (5th Revision) Table 500-17, Minimum Bitumen Content for BC Grade-2 is 5.4%

Sl. No.	Description	Values
1	Weight of bituminous mixture before extraction test, W_1 g	**2000.0**
2	Total Weight of mineral aggregate obtained from centrifuge extractor, W_2 g	**1889.0**
3	Total weight of Bitumen extracted from the mixture, W_3 g = (W_1-W_2) g	**111.0**
4	Bitumen content in %, (W_3/W_1) %	**5.6**

Remarks	**Satisfies the requirement**

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TEST REPORT

GRADATION TEST ON BITUMINOUS CONCRETE MIX GRADE - 2

Name & Address of the Customer	AEE,Yalahanka Division BBMP. Banglore.
Name of Work	**"Improvements to roads and drains balance main and cross roads of B Section in wars no -04"**
Name of the Agency	Sri. Venkatesh. V
Date of Testing	10/03/2021
Technical Reference	IS : 2386(Part I)-1963 (Reaffirmed 2016)

	Sample-1		
IS Sieve Designation (mm)	**% By Weight Passing IS Sieve as per MORTH (5th Revision) Table 500-17 for BC Grade-2**	**Actual % By Weight Passing IS Sieve**	**Remarks**
19	100	**100**	**Satisfies the requirement**
13.2	90-100	**95.5**	
9.5	70-88	**82.3**	
4.75	53-71	**69.2**	
2.36	42-58	**55.1**	
1.18	34-48	**45.6**	
0.6	26-38	**36.9**	
0.3	18-28	**25.1**	
0.15	12-20	**18.3**	
0.075	4-10	**8.4**	

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RATE OF SPREAD OF TACK COAT

Name of the Client	AEE,Yalahanka Division BBMP. Banglore.
Name of Work	**"Improvements to roads and drains balance main and cross roads of B Section in wars no -04"**
Name of Agency	Sri. Venkatesh. V
Date of Testing	12-03-21

Test No.	Area Tested	Rate of spread Kg/m²	As Per MORTH Table 500-5	Remarks
1	Rate of Spread Test conducted for every 500 m² from area 0 to 5000 m²	0.25	0.25 to 0.30 Kg/m²	Satisfactory
2		0.26		Satisfactory
3		0.25		Satisfactory
4		0.26		Satisfactory
5		0.25		Satisfactory

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TEST REPORT

GRADATION TEST ON GRANULAR SUB BASE MATERIALS GRADING - V

Name & Address of the Customer	AEE,Yalahanka Division BBMP. Banglore.
Name of Work	**"Improvements to roads and drains balance main and cross roads of B Section in wars no -04"**
Name of the Agency	Sri. Venkatesh. V
Date of Testing	10/03/2021
Technical Reference	IS : 2386(Part I)-1963 (Reaffirmed 2016)

IS Sieve Designation (mm)	% By Weight Passing IS Sieve as per MORTH (5th Revision) Table 400-1 for GSB Grading-V	Actual % By Weight Passing IS Sieve	Remarks
75	100	**100**	**Satisfies the requirement**
53	80-100	**88.6**	
26.5	55-90	**62.8**	
9.5	35-65	**51.6**	
4.75	25-50	**44.1**	
2.36	10-20	**13.3**	
0.85	2-10	**8.1**	
0.425	0-5	**3.6**	

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TEST REPORT

GRADATION TEST ON WET MIX MACADAM

Name & Address of the Customer	AEE,Yalahanka Division BBMP. Banglore.
Name of Work	**"Improvements to roads and drains balance main and cross roads of B Section in wars no -04"**
Name of the Agency	Sri. Venkatesh. V
Date of Testing	10/03/2021
Technical Reference	IS : 2386(Part I)-1963 (Reaffirmed 2016)

	Sample-1		
IS Sieve Designation (mm)	**% By Weight Passing IS Sieve as per MORTH (4th Revision) Table 400-11 for WMM**	**Actual % By Weight Passing IS Sieve**	**Remarks**
53	100	**100**	**Satisfies the requirement**
45	95-100	**97.7**	
22.4	60-80	**73.6**	
11.2	40-60	**56.7**	
4.75	25-40	**36.5**	
2.36	15-30	**26.9**	
0.6	8-22	**19.8**	
0.075	0-8	**6.5**	

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE,Yalahanka Division BBMP. Banglore.
Name of Work	**"Improvements to roads and drains balance main and cross roads of B Section in wars no -04"**
Name of Agency	Sri. Venkatesh. V
Grade of Concrete	M-15
No. of cubes tested	3
Dimension of Specimen	150mmx150mmx150mm
Cross Sectional Area	22500 mm²
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	Identification	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm²)	Avg Compressive Strength (N/mm²)
1	Covering slab	05/03/2021	02/04/2021	28	8.13	400	**17.78**	**16.62**
2					8.15	360	**16.00**	
3					8.17	362	**16.09**	

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TEST REPORT

GRADATION TEST ON COARSE AGGREGATES 20mm ↓ Graded

Name & Address of the Customer	AEE, Yalahanka Division BBMP. Bangalore
Name of Work	**"Improvements to roads and drains balance main and cross roads of B Section in wars no -04"**
Name of the Agency	Sri. Venkatesh. V
Date of Testing	03/03/2021
Specific Gravity	**2.63**
Water Absorption	**0.31%**
Technical Reference	IS : 2386(Part I)-1963 (Reaffirmed 2016), IS : 2386 (Part III)-1963 (Reaffirmed 2016)

IS Sieve Designation (mm)	Sieve Analysis (% Passing IS Sieve)	Grading Requirement as per IS 383 : 2016	Remarks
40	**100**	100	**Satisfies the requirement**
20	**98.1**	90-100	
10	**47.5**	25-55	
4.75	**8.1**	0-10	

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